



501 Brunner Street
Peru, Illinois 61354

June 27, 2019

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7015166000078186259

Illinois Environmental Protection Agency
Water Pollution Control
Compliance Assurance Section #19
Annual Inspection Report
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Re: 2019 Annual Storm Water Inspection Report
Flint Hills Resources Peru, LLC
NPDES Permit ILR000057

Dear Madam or Sir:

Enclosed is the 2019 Annual Storm Water Inspection Report for the Flint Hills Resources Peru, LLC ("FHRP") facility located in Peru, IL (the "Facility"). This report is being submitted pursuant to Condition 1 of Section K, of the Facility's General NPDES Permit ("Permit").

3rd Quarter 2018 Storm Water Samples

FHR stated in the 2018 Annual Storm Water Inspection Report that an additional benchmark monitoring sample would be collected in 3rd Quarter of 2018. Benchmark monitoring results for total zinc based on the Facility's SIC Code 2821 were below the corrective action limits based on hardness values of the receiving waters. The results of the 2018 3rd Quarter samples collected from discharge point A and discharge point B were 0.050 mg/L and 0.043 mg/L respectively. Receiving water hardness is estimated at 275.76 mg/L based on the average of 71 samples collected from June 2008 through September 2018 by the Illinois Environmental Protection Agency at Station D-23 from the Illinois River.

As required by the Permit, a copy of the Facility's updated Storm Water Pollution Prevention Plan (SWPPP) will be electronically submitted to epa.indilr00swppp@illinois.gov on June 27, 2019.

Additionally, as required by the Permit, the 2019 Annual Inspection Report will be electronically submitted to epa.indannualinsp@illinois.gov on June 27, 2019.

Should you have any questions or need additional information regarding this submittal, please contact Mike Wallman at (815) 224-5451.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Eager'.

Chris Eager
Plant Manager

- Enclosures:
- Attachment 1 – IEPA Annual Facility Inspection Report
 - Attachment 2 – Quarterly Storm Water Inspection Checklist
 - Attachment 3 – Quarterly Storm Water Inspection Reports and Sampling Results (3rd & 4th Qtr 2018 – 1st & 2nd Qtr 2019)
 - Attachment 4 – Summary of Storm Water Related Spill Events during the Reporting Period

ATTACHMENT 1

Flint Hills Resources Peru, LLC
501 Brunner Street
Peru, Illinois
Facility NPDES Permit ID: ILR000057

Illinois EPA Annual Facility Inspection Report



Illinois Environmental Protection Agency

Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT for General Storm Water Discharges Associated with Industrial Site Activities

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report. Place a NA in sections that do not apply to your operation.

Report Period: From: May 1, 2018 To: April 30, 2019

Permit No. ILR00 0057

OWNER/OPERATOR INFORMATION: (As it appears on the current permit)

Name: Flint Hills Resources Peru, LLC
Mailing Address: 501 Brunner Street
City: Peru State: IL Zip: 61354 Telephone: 815-265-6152
Contact Person: Emily Manternach (Person responsible for Annual Report)

FACILITY/SITE INFORMATION: (As it appears on the current permit)

Facility Name: Flint Hills Resources Peru, LLC Primary SIC Code: 2821
Facility Location: 501 Brunner Street
City: Peru IL Zip: 61354 County: LaSalle

RECEIVING WATER INFORMATION:

☐ Storm Sewer Owner of Storm Sewer Systems: _____
☒ Waters of the State Closest Receiving Waters: Illinois River

ADDITIONAL INFORMATION:

Has this facility received an NPDES Permit under a different owner/operator name in the past? If so, list last name permit was issued to: Huntsman Expandable Polymers

Attach information on any activity that has occurred at this facility during the report period that may have resulted in pollutants discharged to storm water runoff (e.g. Spills).

Attach information on any changes to the facility or the activity occurring at the facility that resulted in significant changes to the SWPPP.

Attach information concerning quarterly visual observations of discharges as found in Section E, Item 8 of the Permit.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Owner Signature:

Chris Eager

Printed Name:

Date:

Plant Manager

Title:

EMAIL COMPLETED FORM TO: epa.indannualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

ATTACHMENT 2

Flint Hills Resources Peru, LLC
501 Brunner Street
Peru, Illinois
Facility NPDES Permit ID: ILR000057

Quarterly Storm Water Inspection Checklist

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

Date 8/28/2018 Weather Conditions Rain
Inspector Name/Title: Mike Wallman - Environmental Engineer

Y/N DESCRIPTION: COMMENTS REQUIRED IF ANSWERED YES

- N Trash, litter, debris in the vicinity of stormwater collection system components
- N Significant outdoor accumulations of beads on site
- N Spillage at compactors
- N Improper outdoor storage of materials, equipment, and chemicals
- N Storage boxes and bags -- torn, damaged, exposed to run-off, spillage
- N Tanks -- corrosion, damage, inadequate support, containment issues, leakage, etc.
- N Drums -- corrosion, damage, uncovered, containment issues, spillage, etc.
- N Secondary containment structures -- structural integrity, presence of oil or residue filled with water, valves open?
- N Piping and valves -- corrosion, leakage, supports, etc.
- N Sheen on skimming pond? Over/under weir performing incorrectly? Stop gate (Outfall #2) valve non-operational?
- N Sheen on Manhole-050 water? Over/under weir performing incorrectly? Stop gate (Outfall #1) valve non-operational?
-

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

- N ^{Not} Pumps and hose connections – structurally sound? Leakage?
- N Sludge accumulations near wastewater plant
- N Oil staining on ground (outdoors)
- N Other residue, discolored surfaces (outdoors)
- N Erosion problems
- Y Accumulations of debris/sediment at catch basins/inlets, stop gates, skimmer pond
- N Any non-stormwater discharge to Illinois River
- Y Spill response equipment and supplies at appropriate locations
- N Any other issues of non-compliance observed during this inspection

Signature Mike Wall 8-28-2018

Inspector's Supplemental Comments:

Small amount of bead accumulation on B4 north
pad area, located near storm sewer that discharges into
skimmer pond. B4 & Eagle Cleaning services have regularly
been vacuuming excess beads from North Pad area to control
accumulation.

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

Date 11-4-18 Weather Conditions Moderate Rain

Inspector Name/Title: Mike Wallman - Environmental Engineer

Y/N DESCRIPTION: COMMENTS REQUIRED IF ANSWERED YES

No Trash, litter, debris in the vicinity of stormwater collection system components

No Significant outdoor accumulations of beads on site

Yes Spillage at compactors

No Improper outdoor storage of materials, equipment, and chemicals

No Storage boxes and bags -- torn, damaged, exposed to run-off, spillage

No Tanks -- corrosion, damage, inadequate support, containment issues, leakage, etc.

No Drums -- corrosion, damage, uncovered, containment issues, spillage, etc.

Yes Secondary containment structures -- structural integrity, presence of oil or residue filled with water, valves open?

No Piping and valves -- corrosion, leakage, supports, etc.

No Sheen on skimming pond? Over/under weir performing incorrectly? Stop gate (Outfall #2) valve non-operational?

No Sheen on Manhole-050 water? Over/under weir performing incorrectly? Stop gate (Outfall #1) valve non-operational?

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

No Pumps and hose connections ^{Not} structurally sound? Leakage?

No Sludge accumulations near wastewater plant

No Oil staining on ground (outdoors)

No Other residue, discolored surfaces (outdoors)

No Erosion problems

No Accumulations of debris/sediment at catch basins/inlets, stop gates, skimmer pond

No Any non-stormwater discharge to Illinois River

Yes Spill response equipment and supplies at appropriate locations

No Any other issues of non-compliance observed during this inspection

Signature Mike Walker

Inspector's Supplemental Comments:

Small amount of debris on ground beside Building 3 compactor. This was
cleaned up. Two portable secondary containment spill trays had
rain water with a sheen on-top. The spill trays were emptied into
BY containment pit & then raised out.

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

Date 3/13/19 Weather Conditions Rain/Overcast
Inspector Name/Title: Mike Wallman - Environmental Engineer

Y/N DESCRIPTION: COMMENTS REQUIRED IF ANSWERED YES

- No Trash, litter, debris in the vicinity of stormwater collection system components
- No Significant outdoor accumulations of beads on site
- Yes Spillage at compactors - Building 3 compactor has debris on ground around container.
- No Improper outdoor storage of materials, equipment, and chemicals
- No Storage boxes and bags -- torn, damaged, exposed to run-off, spillage
- No Tanks -- corrosion, damage, inadequate support, containment issues, leakage, etc.
- No Drums -- corrosion, damage, uncovered, containment issues, spillage, etc.
- No Secondary containment structures -- structural integrity, presence of oil or residue filled with water, valves open?
- No Piping and valves -- corrosion, leakage, supports, etc.
- No Sheen on skimming pond? Over/under weir performing incorrectly? Stop gate (Outfall #2) valve non-operational?
- No Sheen on Manhole-050 water? Over/under weir performing incorrectly? Stop gate (Outfall #1) valve non-operational?

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

- No Pumps and hose connections ^{not} ↑ structurally sound? Leakage?
- No Sludge accumulations near wastewater plant
- No Oil staining on ground (outdoors)
- No Other residue, discolored surfaces (outdoors)
- No Erosion problems
- No Accumulations of debris/sediment at catch basins/inlets, stop gates, skimmer pond
- No Any non-stormwater discharge to Illinois River
- Yes Spill response equipment and supplies at appropriate locations
- No Any other issues of non-compliance observed during this inspection

Signature Mike Walker

Inspector's Supplemental Comments:

Building 3 compactor had some debris on ground outside roll-off. This was swept up. There is a small amount of bead build-up around By North End. Shift Supervisors notified to have beads swept and removed from area.

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

Date 5-21-19 Weather Conditions Light Rain

Inspector Name/Title: Mike Wallman / Environmental Engineer

Y/N DESCRIPTION: COMMENTS REQUIRED IF ANSWERED YES

No Trash, litter, debris in the vicinity of stormwater collection system components

Yes Significant outdoor accumulations of beads on site - see comments

Yes Spillage at compactors - trash & debris under Building 3 compactor

No Improper outdoor storage of materials, equipment, and chemicals

No Storage boxes and bags -- torn, damaged, exposed to run-off, spillage

No Tanks -- corrosion, damage, inadequate support, containment issues, leakage, etc.

No Drums -- corrosion, damage, uncovered, containment issues, spillage, etc.

No Secondary containment structures -- structural integrity, presence of oil or residue filled with water, valves open?

No Piping and valves -- corrosion, leakage, supports, etc.

No Sheen on skimming pond? Over/under weir performing incorrectly? Stop gate (Outfall #2) valve non-operational?

No Sheen on Manhole-050 water? Over/under weir performing incorrectly? Stop gate (Outfall #1) valve non-operational?

QUARTERLY STORM WATER MANAGEMENT INSPECTION CHECKLIST

- No Pumps and hose connections ^{Not} structurally sound? Leakage?
- No Sludge accumulations near wastewater plant
- No Oil staining on ground (outdoors)
- No Other residue, discolored surfaces (outdoors)
- No Erosion problems
- No Accumulations of debris/sediment at catch basins/inlets, stop gates, skimmer pond
- No Any non-stormwater discharge to Illinois River
- Yes Spill response equipment and supplies at appropriate locations
- No Any other issues of non-compliance observed during this inspection

Signature Mike Walker

Inspector's Supplemental Comments:

Beard accumulation was discovered north of parking, on the BY north pad, and along the jersey barrier on facility east side (near east guard house). WO# PE86824 was submitted to clean-up beard accumulation and the trash/debris under Building 3 Compactor. WO# PE86800 was submitted to have bottom of Building 3 Compactor evaluated for cracks and repairs be made. The IL River flooded the facility in early May 2019 and there was not a significant amount of debris or sediment found during this inspection.

ATTACHMENT 3

Flint Hills Resources Peru, LLC
501 Brunner Street
Peru, Illinois
Facility NPDES Permit ID: ILR000057

**Quarterly Storm Water Inspection Reports and
Sampling Results
(2nd & 3rd Qtr 2018 – 1st & 2nd Qtr 2019)**

Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	8/24/18 - 09:50
Nature of the Qualifying Event (Rain/Snow Melt)	Rain
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	0.34 inches
Date and Time of Sampling	8/24/18 - 09:50
Sample Location	Duck Pond
Sample Collector's Name and Title	Brandel Weisheit / RSI ops

Sample Observer's Name and Title (must be different from sample collector)	Adam Chapman - Environmental Engineer
Time of Sample Observation	12:30 - 8/29/18
Color	None
Odor	None
pH	8.34
Clarity	Very Clear
Floating Solids	None
Settled Solids	Small Amount Small Particles
Suspended Solids	Minimal Amount of Susp. Solids
Foam	None
Oil Sheen	None
Other Obvious Indicators of Pollution	None

Brandel Weisheit / RSI ops
Signature/Title of Sample Collector

8-24-18
Date

Adam Chapman / Environmental Engineer
Signature/Title of Sample Observer

8/29/18
Date:

Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	8/24/18 - 9:55
Nature of the Qualifying Event (Rain/Snow Melt)	Rain
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	0.34 Inches
Date and Time of Sampling	8/24/18 - 9:55
Sample Location	MH-050
Sample Collector's Name and Title	Brandt Weisheit - P4 ops

Sample Observer's Name and Title (must be different from sample collector)	Adam Chapman Environmental Engineer
Time of Sample Observation	12:35 - 8/29/18
Color	None
Odor	None
pH	8.42
Clarity	Very Clear
Floating Solids	None
Settled Solids	Small Amount Small Particles -
Suspended Solids	Very Minimal Amount Near Bottom of Jar
Foam	None
Oil Sheen	None
Other Obvious Indicators of Pollution	None

Brandt Weisheit / P4 ops
Signature/Title of Sample Collector

8-24-18
Date

Adam Chapman / Environmental Engineer
Signature/Title of Sample Observer

8/29/18
Date:

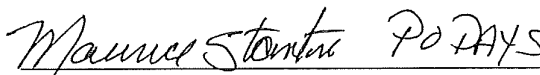
Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	11-25-2018 08:45
Nature of the Qualifying Event (Rain/Snow Melt)	Rain
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	1.25 inches
Date and Time of Sampling	11-25-18 08:45-08:50
Sample Location	MH-50
Sample Collector's Name and Title	Dustin Carlson - Shift Supervisor

Sample Observer's Name and Title (must be different from sample collector)	Maurice Stanton - PO Operator
Time of Sample Observation	08:50
Color	Clear
Odor	None
pH	8.16
Clarity	Clear
Floating Solids	A few small debris particles
Settled Solids	Very thin layer of dirt
Suspended Solids	None
Foam	None
Oil Sheen	None
Other Obvious Indicators of Pollution	None


Signature/Title of Sample Collector

11-25-18
Date


Signature/Title of Sample Observer

11-25-18
Date:

Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	11-25-2018 08:45
Nature of the Qualifying Event (Rain/Snow Melt)	Rain
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	1.25 inches
Date and Time of Sampling	11-25-2018 08:45
Sample Location	Duck Pond
Sample Collector's Name and Title	Dustin Carlson - Shift Supervisor

Sample Observer's Name and Title (must be different from sample collector)	Maurice Stanton - PO Operator
Time of Sample Observation	08:45
Color	Clear & Slightly Gray
Odor	None
pH	7.82
Clarity	Slightly Murky
Floating Solids	None
Settled Solids	None
Suspended Solids	None
Foam	None
Oil Sheen	None
Other Obvious Indicators of Pollution	None


 Signature/Title of Sample Collector

11-25-18
 Date

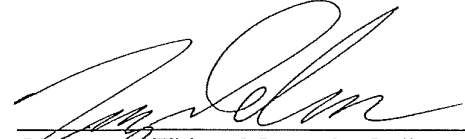
 P.O. DAYS
 Signature/Title of Sample Observer

11-25-18
 Date:

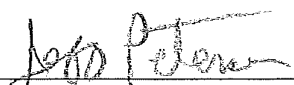
Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	3/9/19 @ 13:45
Nature of the Qualifying Event (Rain/Snow Melt)	Rain / sleet
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	7.25 inches Total = 0.80 in.
Date and Time of Sampling	3/9/19 @ 1400
Sample Location	Duck Pond
Sample Collector's Name and Title	Tracy Adams - Shift Supervisor

Sample Observer's Name and Title (must be different from sample collector)	Jeff Petersen - Utilities Operator
Time of Sample Observation	1400
Color	Clear
Odor	NONE
pH	7.69
Clarity	Clear
Floating Solids	NONE
Settled Solids	Thin layer of dirt particles on bottom 1/64"
Suspended Solids	NONE
Foam	NONE
Oil Sheen	NONE
Other Obvious Indicators of Pollution	NONE


 Signature/Title of Sample Collector

3/9/19
 Date


 Signature/Title of Sample Observer

3-9-19
 Date:


Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	3/9/19 @ 1345
Nature of the Qualifying Event (Rain/Snow Melt)	Rain Sleet
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	>.25 inches / Total = 0.80 in
Date and Time of Sampling	3/9/19 @ 1410
Sample Location	west man hole MH-50
Sample Collector's Name and Title	Tracy Adams - Shift Supervisor

Sample Observer's Name and Title (must be different from sample collector)	Jeff Petersen - Utilities Operator
Time of Sample Observation	1410
Color	Clear w/ Slight Gray
Odor	NONE
pH	7.84
Clarity	Clear / Slightly Translucent
Floating Solids	NONE
Settled Solids	Thin layer of dirt particles on bottom 1/32"
Suspended Solids	NONE
Foam	NONE
Oil Sheen	NONE
Other Obvious Indicators of Pollution	NONE


 Signature/Title of Sample Collector

3/9/19
 Date

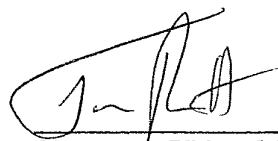

 Signature/Title of Sample Observer

3-9-19
 Date:

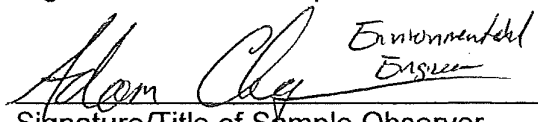
Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	5/17/19 11:35 AM
Nature of the Qualifying Event (Rain/Snow Melt)	Rain
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	.36 in
Date and Time of Sampling	5/17/19 11:35 AM
Sample Location	MH-50
Sample Collector's Name and Title	Tommie Pratt - Shift Supervisor

Sample Observer's Name and Title (must be different from sample collector)	Adam Chapman - Environmental Engineer
Time of Sample Observation	11:35 AM
Color	Clear
Odor	None
pH	8.47
Clarity	Mostly Clear
Floating Solids	None
Settled Solids	Small amount of dispersed particles on bottom
Suspended Solids	None
Foam	None
Oil Sheen	None
Other Obvious Indicators of Pollution	None


 Signature/Title of Sample Collector

5/17/19
 Date



 Signature/Title of Sample Observer

5/17/19
 Date:


Quarterly Storm Water Sample Collection and Visual Observation

Date and Time of the Qualifying Event	5/17/19 11:30 AM
Nature of the Qualifying Event (Rain/Snow Melt)	Rain
Magnitude of the Qualifying Event (must be .25 inches to be qualifying rain event)	.36 in
Date and Time of Sampling	5/17/19 11:30 AM
Sample Location	Duck Pond
Sample Collector's Name and Title	Tommie Pratt - Shift Supervisor

Sample Observer's Name and Title (must be different from sample collector)	Adam Chapman Environmental Engineer
Time of Sample Observation	11:30 AM
Color	Clear w/ Grey Slight tint
Odor	None
pH	8.23
Clarity	Mostly Clear - Slightly Grey
Floating Solids	None
Settled Solids	Bottom Covered approx. 1/32"
Suspended Solids	Small Amount
Foam	None
Oil Sheen	None
Other Obvious Indicators of Pollution	None


 SUPERVISOR
 Signature/Title of Sample Collector

5/17/19
 Date


 Environmental Engineer
 Signature/Title of Sample Observer

5/17/19
 Date:

ATTACHMENT 4

Flint Hills Resources Peru, LLC
501 Brunner Street
Peru, Illinois
Facility NPDES Permit ID: ILR000057

Summary of Spill Events During the Reporting Period May 1, 2018 through April 30, 2019

(List of Spills Potentially Impacting Stormwater Runoff)

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
June 6, 2018	16:00	5 minutes	Approximated at 2 quarts	Antifreeze	West side of Building 4	A parked contractor truck leaked anti-freeze onto asphalt.	Contractor truck leak	Asphalt	Absorbent pads were used to absorb the antifreeze. The antifreeze was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
June 8, 2018	09:00	2 minutes	< 1 cup	Diesel	Main gain entrance	During a rain event an employee noticed a sheen in front of the facility's main gate entrance. The sheen was traced to a diesel re-fueling tanker that had left the facility.	Contractor truck leak	Asphalt	Absorbent pads and granular oil absorbent were immediately used to absorb the sheen. The sheen was contained onsite and was not discharged to the storm water sewer system. Other areas throughout the plant were inspected for sheens and none were discovered. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
June 17, 2018	06:00	3 hours	Approximated at 2 gallons	Wastewater	Process wastewater pipe rack located north of cooling towers	While completing equipment rounds, shift supervisor noticed a pipe in the Building 4 process water pipe rack was sagging and dripping wastewater onto asphalt. It was observed the pipe hanger support system was broken.	Broken pipe rack hanger support	Asphalt	The wastewater was contained and absorbed with absorbent pads and pigs. The wastewater did not migrate into the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The pipe rack was repaired on June 18 th .
July 18, 2018	11:00	.5 minutes	Approximated at 22 gallons	Hydraulic fluid	South of Building 4 concrete pad	The hydraulic hose on a contractor's roll-off truck broke while staging a roll-off container on the Building 4 concrete pad. Hydraulic fluid leaked onto the asphalt and gravel to the South of the Building 4 concrete pad.	Contractor truck hydraulic hose	Asphalt and gravel	Absorbent pads, pigs, and granular oil absorbent were immediately used to contain and absorb the hydraulic fluid. The hydraulic fluid did not enter the facility storm water sewer system initially, however, during a July 19 th rain event the hydraulic fluid residue on the asphalt caused a sheen which migrated into the facility storm water retention pond. The storm water retention pond discharge valve was in the closed position and no water was discharged to the river. The sheen on the retention pond was pumped to facility's wastewater treatment plant on July 19 th . The contaminated gravel was excavated and replaced on July 23 rd and an industrial cleaning contractor washed and cleaned the asphalt on July 24 th . All absorbent materials and gravel from the event were properly disposed of in accordance with the facility's waste management procedure.

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
July 28, 2018	21:09	23 minutes	Approximated at 2 gallons	Oil	Main gate entrance to end of shipping and receiving area	Employee noticed small puddle of oil at main gate entrance. Upon further inspection of plant areas, drips of oil were discovered to intermittently span from main gate entrance to past shipping and receiving. The oil drips were traced to a contractor semi-truck that picked-up a trailer.	Contractor truck leak	Asphalt	Absorbent pads and granular oil absorbent were used to absorb the oil puddle and drips. The oil was not discharged to the facility's storm water sewer system. On July 30 th an industrial cleaning contractor washed and cleaned the oil stained asphalt surfaces throughout the plant. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
August 7, 2018	12:30	Unknown	< 4 ounces	Oil sheen	East of maintenance shop	After a rain event, an employee noticed a 3' by 3' oil sheen on the asphalt in front of the maintenance shop. The oil drips were believed to have come from a truck.	Truck leak	Asphalt	Absorbent pads were used to absorb the oil sheen. The sheen was not discharged to the facility's storm water sewer system. FHR maintenance vehicles were inspected for leaks and no indications were found. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
August 15, 2018	12:05	Unknown	≤ 2 ounces	Oil sheen	East of utilities office entrance	An employee noticed two small oil sheens on the asphalt east of the Utilities office entrance. The sheens were approximately 1' by 1'. The oil drips were traced to a contractor truck that parked in the area earlier in the day.	Contractor truck leak	Asphalt	Absorbent pads were used to absorb the oil sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
August 24, 2018	11:20	.25 minutes	Approximated at 10 gallons	Used water and floor polish	Main guard house	The facility janitorial services contractor spilled a bucket of used water and floor polish onto the asphalt outside main guard house.	Bucket tipped over	Asphalt	Absorbent pads were used to absorb the water and floor polish. The spilled liquid was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
August 26, 2018	00:05	Unknown	< 1 cup	Oil	Tank farm entrance	While completing equipment rounds, shift supervisor noticed an oil stain on the ground outside the tank farm entrance. The oil was traced to a contractor vacuum truck that was parked in the area during day shift.	Contractor truck leak	Asphalt	Absorbent pads and pigs were used to absorb the oil stain. The oil was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
September 4, 2018	16:30	Unknown	< 2 cups	Steam condensate	Flare building	An employee noticed a 2' by 2' puddle of water outside the flare house. It was discovered a steam trap in the flare house was leaking.	Leaking steam trap	Concrete	Absorbent pads and pigs were used to contain and absorb the condensate. The condensate was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. A containment was placed under the condensate leak until the steam trap was repaired on September 11 th .
September 6, 2018	08:10	30 minutes	< 2 ounces	Oil sheen	South of Building 4 sound enclosure	While completing equipment rounds, shift supervisor discovered a puddle of rainwater with an oil sheen outside the Building 4 sound enclosure. It is believed residual oil leftover from a pump oil change caused the sheen to develop.	Pump oil change	Asphalt	Absorbent pads were used to absorb the oil sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
September 7, 2018	07:43	Unknown	< 2 ounces	Oil sheen	East of contractor breakroom	Shift supervisor discovered a small oil sheen 12" in diameter to the east of the contractor break room. The oil sheen is believed to have come from a truck.	Truck leak	Asphalt	Absorbent pads were used to absorb the oil sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
September 25, 2018	15:00	Unknown	< 1 cup	Oil	Main gate entrance	An employee discovered small oil drips and stains on ground in front of the main gate entrance. The oil drips were believed to have come from a truck.	Truck leak	Asphalt	Absorbent pads and granular oil absorbent were used to absorb the oil. The oil was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
September 27, 2018	08:50	5 minutes	Approximated at 10 gallons	Cooling water	Cooling towers	While preparing the cooling tower for maintenance work, basin B's inlet valves were closed causing a flow spike into basin A. As a result, cooling tower water overflowed out of basin A onto asphalt.	Cooling tower basin overflow	Asphalt	Absorbent pads and pigs were used to absorb and contain the water. The water was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
September 27, 2018	11:00	5 minutes	Approximated at 20 gallons	Cooling water	Cooling towers	While preparing the cooling tower for maintenance work, basin B's inlet valves were closed causing a flow spike into basin A and D. As a result, cooling tower water overflowed out of basin A and D onto asphalt.	Cooling tower basin overflow	Asphalt	Absorbent pads and pigs were used to absorb and contain the water. The water was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
September 30, 2018	19:30	30 minutes	Approximated at 50 gallons	Cooling water	Cooling towers	Cooling tower basin overflowed to asphalt due to increase in flow. Cooling tower pump A shutdown and would not restart. Cooling tower B pump was started-up and outlet valve was 100% open.	Cooling tower basin overflow	Asphalt	Cooling tower pump B's outlet valve was choked down to stabilize flow. Absorbent pads and pigs were used to absorb and contain the water. The water was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
October 2, 2018	10:00	45 minutes	< 3 cups	Hydraulic oil	North of extrusion warehouse entrance	Employee discovered a 3' by 3' puddle of hydraulic oil on the asphalt to the north of the extrusion warehouse. A contractor flatbed truck that picked up equipment earlier in the morning leaked the fluid.	Contractor truck leak	Asphalt	Absorbent pads were used to absorb the hydraulic oil. The oil was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
October 30, 2018	12:00	5 minutes	< 2 ounces	Oil	Main gate entrance	Plant security guard discovered a small puddle of oil on the asphalt outside the main gate. The oil was traced to a contractor truck that dropped equipment off earlier in the day.	Contractor truck leak	Asphalt	Absorbent pads and pigs were used to absorb the oil. The oil was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
November 4, 2018	12:11	20 minutes	Approximated at 25 gallons	Cooling water	South closed-loop heat exchanger	While performing a first line break on the closed-loop south heat exchanger supply line, cooling water leaked to asphalt. The pipe was pitched in a manner that did not allow all water to drain out prior to work starting.	Controlled line break	Asphalt	Absorbent pads and pigs were used to absorb and contain the water. The water was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
November 6, 2018	07:30	5 minutes	< 1 cup	Gasoline	West of Building 4	Employee discovered three small sheens of gasoline on the asphalt to the west of Building 4. The sheens were traced to a contractor truck that was onsite earlier in the day to perform shutdown work.	Contractor truck leak	Asphalt	Absorbent pads and pigs were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
November 15, 2018	10:00	Unknown	< 4 ounces	Oil sheen	Northeast of maintenance shop	Employees discovered two 6' to 8' diameter oil sheens on the asphalt outside the maintenance shop during a snow event.	Unknown	Asphalt	Absorbent pads and pigs were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. FHR inspected all vehicles inside plant, and none were found leaking.
November 15, 2018	15:15	Unknown	< 2 ounces	Oil sheen	Northwest of building 4	Employee discovered a 6' diameter oil sheen on the asphalt outside Building 4 during a snow event.	Unknown	Asphalt	Absorbent pads and pigs were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. FHR inspected all vehicles inside plant, and none were found leaking.

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
November 15, 2018	16:00	Unknown	< 2 ounces	Oil sheen	Administration building parking lot	An employee reported an oil sheen underneath a vehicle parked in the administration building parking lot.	Employee vehicle	Asphalt	Absorbent pads and pillows were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The employee whose vehicle was leaking was informed.
November 26, 2018	11:30	5 minutes	Approximated at 2 quarts	Sanitation water	East guard house	High winds tipped over a porta potty staged at the facility east guard house. Sanitary waste and liquid leaked out of the porta potty onto snow covering the concrete.	Tipped over porta potty	Concrete	FHR placed absorbent pigs around the spilled liquid to contain it. The porta potty company was called to clean the surrounding area and remove the porta potty from the facility. There was no impact to the facility storm water sewer system.
December 9, 2018	07:00	Unknown	Approximated at 2 gallons	Wastewater	Wastewater treatment plant	Employee discovered wastewater dripping from bolt on SBC-A. The wastewater had formed a small puddle on the SBC concrete pad and was frozen.	Leak on SBC-A	Concrete	FHR cleaned up the ice and placed a containment basin underneath the leak. There was no impact to the facility storm water sewer system. The leak was plugged on December 10 th .
December 9, 2018	14:03	5 minutes	< 2 ounces	Oil	Main gate entrance	Plant security guard discovered small oil stains approximately 6" in diameter on both sides of the main gate. The oil was traced to a semi-truck that was picking up a trailer.	Contractor truck leak	Asphalt	Granular oil absorbent was used to absorb the oil. The oil was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
December 10, 2018	17:21	Unknown	< 2 ounces	Oil	Main gate entrance	Plant security guard discovered a 3' by 1' oil stain at the main gate entrance. The oil drips were believed to have come from a truck.	Truck leak	Asphalt	Granular oil absorbent was used to absorb the oil. The oil was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
December 11, 2018	15:15	Unknown	< 2 ounces	Oil sheen	Administration building parking lot	An employee reported a 3' by 3' oil sheen between two vehicles parked in the administration building parking lot.	Employee vehicles	Asphalt	Absorbent pads and pillows were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The surrounding area was inspected, and no other sheens were discovered.
January 10, 2019	10:00	10 minutes	< 4 ounces	Oil	Main gate entrance and east of maintenance shop	After a contractor truck delivered packages, an employee reported small oil drips and 3 oil stains approximately 6" by 6" at the main gate entrance and east of the maintenance shop.	Contractor truck leak	Asphalt	Absorbent pads and pillows were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
January 23, 2019	01:10	1 hour and 20 minutes	Approximated at 1,275 gallons	Steam condensate	Condensate return line west of the Building 4 bead recovery building	Condensate return line from the Building 4 bead recovery building ruptured at the elbow and leaked condensate to asphalt and gravel.	Condensate return line rupture	Asphalt and gravel	Absorbent pads and pigs were immediately used to absorb and contain the water. The water was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The upstream valve on the condensate return line was closed on January 23 rd at approximately 02:30 and repairs were completed on the line by February 12 th .
January 31, 2019	13:00	Unknown	< 2 cups	Oil	Building 4 compactor	An employee reported oil staining on the Building 4 compactor and concrete pad. It is believed rainwater infiltrated the compactor's oil reservoir causing the amount of liquid in the tank to exceed storage capacity.	Water infiltrated the compactor oil reservoir and froze due to subfreezing temperatures. When the water froze it caused oil to leak out.	Concrete	Absorbent pads and pigs were used to absorb and contain the oil. The oil was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. A work order was completed to stop the leak and identify the source of the issue on January 31 st .

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
February 11, 2019	07:30	Unknown	< 4 ounces	Oil sheen	Main gate entrance and east of maintenance shop	A shift supervisor reported oil sheens in front of the main gate entrance and to the east of the maintenance shop. It is believed the oil drips originated from a vehicle.	Vehicle leak	Asphalt	Absorbent pads and pillows were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. The FHR plant maintenance vehicle was inspected for leaks and none were found. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
February 11, 2019	10:15	Unknown	< 4 ounces	Oil	East of cooling water towers	An employee reported approximately 10 nickel sized oil drips on the asphalt to the east of the cooling water towers. It is believed the oil drips originated from a vehicle. Other plant areas were inspected for oil and none were found.	Vehicle leak	Asphalt	Absorbent pads and pillows were used to absorb the sheen. The sheen was not discharged to the facility's storm water sewer system. The FHR plant maintenance vehicle was inspected for leaks and none were found. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
February 11, 2019	11:40	1 hour and 25 minutes	Approximated at 850 gallons	Cooling water	South plate frame closed-loop system	During the collection of a closed-loop water sample, a threaded connection on the south plate frame closed-loop system broke causing cooling water to spill to asphalt. The water entered a nearby storm drain and migrated into the facility storm water retention pond. The storm water retention pond discharge valve was in the closed position and no water was discharged to the river.	Broken threaded connection on south plate frame closed-loop system	Asphalt	Absorbent pads and pigs were immediately used to absorb and contain the water. The water entered a nearby storm drain and migrated into the facility storm water retention pond. The storm water retention pond discharge valve was in the closed position and no water was discharged to the river. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The upstream valve on the closed-loop system was closed on February 11 th and repairs were made on February 12 th . The stormwater retention pond was pumped to the facility wastewater treatment plant on February 14 th .

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
February 14, 2019	16:30	Unknown	Approximated at 10 gallons	Condensate water	Building 4 north pad D10 condensate pump	A shift supervisor reported condensate leaking from the D10 condensate pump seal on the Building 4 north pad. The water entered a nearby storm drain and migrated into the facility storm water retention pond. The storm water retention pond discharge valve was in the closed position and no water was discharged to the river.	Condensate pump seal failure	Asphalt	Absorbent pads and pigs were immediately used to absorb and contain the water. The water entered a nearby storm drain and migrated into the facility storm water retention pond. The storm water retention pond discharge valve was in the closed position and no water was discharged to the river. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The condensate pump was shut down on February 14 th and the seal was replaced on February 18 th . The stormwater retention pond was pumped to the facility wastewater treatment plant on February 15 th .
February 20, 2019	12:09	Unknown	< 2 ounces	Oil sheen	Main gate entrance	An employee discovered an oil sheen on the asphalt in front of the main gate entrance. The sheen was traced to a contractor vehicle that was still onsite.	Contractor truck leak	Asphalt	Absorbent pads were used to absorb the oil sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. A spill tray was placed underneath the contractor's vehicle.
March 12, 2019	10:00	Unknown	Approximated at 20 gallons	Condensate water	Building 4 north pad D11 condensate pump drain line	A shift supervisor reported condensate leaking from the D11 condensate pump drain line on the Building 4 north pad. The water entered a nearby storm drain and migrated into the facility storm water retention pond. The storm water retention pond discharge valve was in the closed position and no water was discharged to the river.	Condensate pump drain line leak	Asphalt	Absorbent pads and pigs were used to absorb and contain the water. The water entered a nearby storm drain and migrated into the facility storm water retention pond. The storm water retention pond discharge valve was in the closed position and no water was discharged to the river. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The condensate pump was shutdown on March 12 th and repairs were made to the drain line on March 13 th . The stormwater retention pond was pumped to the facility wastewater treatment plant on March 12 th .

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
April 5, 2019	09:00	15 minutes	Approximated at 5 gallons	Oil sheen	Main gate entrance to southeast of cooling towers	An employee noticed an oil sheen spanning from the main gate entrance to southeast of the cooling towers. The length of the sheen was estimated to be approximately 80 to 100 yds. The sheen was traced to a non-FHR roll-off container that a waste contractor temporarily stored on FHR property. The roll-off was stored on the property while the contractor serviced a separate FHR roll-off. The contractor stored the other roll-off container on FHR's property since it was a for a customer located near the facility.	Oily substance dripped out of non-FHR roll-off container	Asphalt	Absorbent pads and granular oil absorbent were used to absorb the oil sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure.
April 7, 2019	08:00	Unknown	< 1 cup	Oil sheen	Walkway between cooling towers and extrusion warehouse	During a rain event a shift supervisor reported seeing an oil sheen near the walkway south of the cooling towers. It is believed the sheen originated from oil drip residue leftover from the April 5 th incident.	Oil drip residue leftover from April 5 th incident	Asphalt	Absorbent pads and granular oil absorbent were used to absorb the oil sheen. The sheen was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The area was inspected throughout the duration of the rain event to ensure it was mitigated.
April 11, 2019	14:30	5 minutes	Approximated at 1 gallon	Transmission fluid	South west of the centralized waste accumulation area	A contractor semi-truck was completing a waste drum pick-up and leaked transmission fluid onto the gravel to the southwest of the waste accumulation area.	Contractor truck leaking transmission fluid hose	Gravel	Absorbent pads were immediately placed underneath the truck at the source of the leak. A spill containment tray was then placed underneath the truck to catch drips. The fluid was not discharged to the facility's storm water sewer system. All absorbent materials were properly disposed of in accordance with the facility's waste management procedure. The contractor called a truck mechanic and the leaking line was patched before the truck left the facility. The gravel that contacted the transmission fluid was removed on April 12 th .

Incident Date	Time of Spill (24-Hr Format)	Duration of Spill (minutes)	Estimated Release Quantity	Material(s) Involved	Location of Spill	Description of Spill	Cause of Spill	Spilled Surface	Mitigation and Prevention
April 30, 2019	10:00	5 hours	Approximated at 30 gallons	Wastewater foam	Southwest of wastewater biological treatment units	An employee discovered wastewater foam on the asphalt to the west of the biological treatment units. It was discovered the top goose neck vents were dripping foam down the sides of the unit onto asphalt. The wastewater entered a nearby storm drain, however, the storm water discharge valve on the west side of the plant was in the closed position and no water was discharged to the river.	Biological treatment unit vents dripping foam	Asphalt	Wastewater defoamer was immediately added to the biological units. Absorbent pigs were placed on the west side on the units to absorb and contain the wastewater and spill containment trays were placed underneath the leaks. The stormwater discharge valve was in the closed position and no water was discharged to the river. The storm drain was pumped out and sent to the facility's wastewater treatment plant on April 30 th .